Ordway Center for the Performing Arts
Music Theater Technical Information
## General Facility Information

**Address**
Ordway Center for the Performing Arts  
345 Washington Street  
St. Paul, Minnesota 55102  
www.ordway.org  
(651) 282-3000

**Contact**
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<thead>
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<th>Email</th>
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<tr>
<td>Stage Door</td>
<td>(651) 282-3070</td>
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Stage Door and Loading Dock

- The Stage Door and Loading Dock are located immediately off Fifth Street between Washington Street and West Seventh Street immediately adjacent to the River Centre/Roy Wilkins Auditorium. Fifth Street is a one-way street running west to east.
- The Stage Door has an accessible ADA ramp on the east side of the entrance.
- The most direct highway access is the Fifth Street Exit from Eastbound I-94.
- From all other points follow directional signs to the River Centre or Xcel Energy Center. The Ordway is located east of the Xcel Center.
- The Loading Dock is 4’ – 0” above ground level, and level with the stage floor.
- The Loading Dock accesses the Music Theater stage on the Stage Left side of the stage. The Concert Hall is accessed from the dock via a vestibule that feeds into the rear service corridor.
- The Loading Dock can accommodate three (3) 53’ tractor-trailers. There are levelers at every dock bay with retractable dock tongues.
- The Freight elevator is located in the rear service corridor and can be accessed from the service corridor vestibule or from the Music Theater stage at the loading doors USL. The freight elevator doors measure 7’-11”w x 8’-11”h x 13’-2”d and has a weight capacity of 12,000lbs. The Freight Elevator accesses the loading dock/stage level, basement/orchestra pit level, and The Drake Room, US Bank Room at the second floor level of the Music Theater.
- During the run of an event, one loading bay may be occupied on a negotiated space-available basis. No other vehicle parking or trailer storage facilities are available.
- Shore power is available for bus parking through special arrangement with Ordway Center. Feeder run is approximately 150’. Feeder is not provided.
- A 60 amp 3 Phase -5 wire service disconnect will be available at the loading dock with transformer isolated power. This can be used only for audio/video remote vehicles. Feeder is not provided.
Map of Ordway and Surroundings

From the West
Take I-94 East to Exit 241B - (5th Street).
Follow across 7th Street staying in center lane.
Slight Right onto 5th Street
Go past Xcel Center.
The Ordway Loading Dock is adjacent to the Roy Wilkins Auditorium

From the East
Take I-94 West to Exit 242 D
Follow to W. 5th Street
Go past Xcel Center.
The Ordway Loading Dock is adjacent to the Roy Wilkins Auditorium
Layout of Dock and Backstage Service Areas

Dock Doors
1, 2, 3 – 9’ w x 9’-3”h (between seals – 7’-7”w x 8’-10”h)
A – 11’-4”w x 11’-8”h
B – 5’-8”w x 7’-8”h
C – 5’10”w x 7’-8”h
D – 5’-10”w x 6’-10”h

Backstage to FOH Door Openings
- 1st floor – 5’w x 6’-10”h
- 2nd floor – 5’-7”w x 6’-9”h
## Seating Layout

<table>
<thead>
<tr>
<th>Area</th>
<th>Seats</th>
<th>Wheelchair</th>
<th>Standing Room</th>
</tr>
</thead>
<tbody>
<tr>
<td>Orchestra</td>
<td>706</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Mezzanine</td>
<td>574</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Balcony</td>
<td>349</td>
<td>0</td>
<td>8</td>
</tr>
<tr>
<td>Gallery</td>
<td>274</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>1907</strong></td>
<td><strong>3</strong></td>
<td><strong>52</strong></td>
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</tbody>
</table>

![Seating Diagram](image-url)
Seating Configurations

Tour Sound Console:
14 seats can be removed for a 7-1/2' x 9-0" area. (LL 208 – 214 and MM 208 – 214)

Tour Light Console:
14 seats can be removed for a FOH lighting console position. (LL 201 – 207 and MM 201 – 207)

Setting Orchestra Pit:
48 seats for pit removed from sale; rows A, B, C, and D.

Setting Thrust:
124 seats for full pit removed from sale; rows A- G
Stage Specifications

Stage Dimensions
The Proscenium Opening is adjustable in width rolling tormentor towers located immediately downstage of the Smoke Pocket.

- Maximum Proscenium Width: 65' - 8"
- Minimum Proscenium Width: 50' - 0"
- Fixed Proscenium Height: 34' - 6"
- Overall stage width: 136 - 0"
- Centerline to stage right fly rail: 54' - 0"
- Centerline to stage left wall: 82' - 0"
- Apron lip to upstage edge of stage floor: 49' - 5"
- Apron lip to plaster line: 5' - 5"
- Plaster line to upstage edge of stage floor: 44' - 0"
- Height of stage floor from house floor: 3' - 0"
- Height of stage floor from orchestra pit: 8' - 0"

Stage Floor
- The stage floor is oak tongue-and-groove flooring on resilient pads over wooden sleepers suitable for dance.
- There are currently 24 working traps ((a) 3'w x 6’d) located symmetrically off centerline; 8 wide by 3 deep. The floor is also trapped in specific locations, but preparation is extensive.
- If you lag into the floor, the holes must be filled after the run, and the cost will be billed to the production
- House has a Black Tarkett heavyweight dance floor, approximately 56' wide x 36' deep.

Stage Gridiron
- The gridiron measures 108' wide x 43' deep.
- It starts 1' from and extends 44' upstage of the proscenium wall.
- Height of gridiron above stage floor is 80' - 0"
- The gridiron is constructed of steel "subway" grating on I-beam.
- Load rating 250-lbs/sq. ft.
- There is 3'long rigging pipes and 6” aluminum I-Beams available to span grating and/or channels.
- Chain motors must be rigged to overhead I-Beams or on long grid pipe.

Ante-Pro Gridiron
- The Ante-Pro Gridiron is located downstage of the proscenium over the convertible areas in the house.
- Dimensions of ante-pro gridiron are: 72' wide x 12' deep.
- The Upstage edge of ante-pro gridiron is 13’ downstage of plaster line.
- The height of ante-pro gridiron above stage level: 60'
- The height of ceiling above ante-pro gridiron: 8'
- The gridiron is constructed of steel "subway" grating on I-beam. Load rating 250-lbs./sq. ft.
- The Ante-pro is storage for house sound system that are raised and lowered via dedicated winches.
- Chain motors, in most cases, must be rigged to overhead I-Beams.
Gallery Bridge

- A catwalk runs entirely around three sides of the stage house
- Distance from centerline to Stage Left Gallery Bridge: 52' - 6"
- Distance from centerline to Stage Right Gallery Bridge: 49' - 0"
- Distance from plaster line to upstage Gallery Bridge: 41' - 0"
- Height of Gallery Bridge from stage floor 47' - 0"
- Height of lower loading bridge, stage right 62' - 0"
- Height of upper loading bridge, stage right 72' - 0"
- Counterweight available for production use on both loading bridges is approximately 30,000 pounds.

STAGE RIGGING - FLY SYSTEM

There are sixty-seven (67) general purpose line sets over the stage.
- Line sets consist of 1-1/2" I.D. Schedule 40 steel pipe
- Batten lengths
  - (43) line sets are 62' with six (6) lift lines each set
  - (24) line sets are 86' with eight (8) lift lines each set
- Arbor capacity: 1,200 lbs.
- Arbor height: 10'
  - Maximum travel (high trim) of line sets from deck: 73' - 4"
  - Minimum travel (low trim) of line sets from deck: 4' - 0"

_Note that line sets #10 and #12, depending on actual hanging situation, have a high trim of approx. 50' due to interference from the orchestra shell ceiling_

- There are two (2) cabled lighting trusses over the stage.
  - House No. 1 electric is on line set no. 5. Note: This truss is not removable.
  - House No. 2 electric is on line set no. 59. Note: this truss is not removable.
    - Both line sets consist of a triangular truss batten of 1-1/2" I.D. steel pipe. Truss Length 86' - 0". Depth 1' - 4" Height: 2' - 6"
    - Maximum travel (high trim) of No. 1 electric from deck: 65' - 4". No. 2 electric: 54' - 0"
      _Lighting truss line sets are manually operated and are not suitable for operating pieces in view during a performance. Lighting truss arbor capacity 900 lbs. over truss weight._

There is one (1) motorized orchestra shell ceiling unit on a truss batten over the stage.
- Ceiling unit stores vertically and pivots to become an acoustical reflector unit.
- **Cannot be removed.**
  - Location: Line set no. 11
  - Ceiling width: 65' - 9" Depth: 10" Height: 12' (vertical position)
  - Maximum travel (high trim) from deck: 50' - 9"

General Notes:
- Fly rail is located stage right on the deck
- Line sets are not moveable, but house has rollers to breast working lines slightly
Head and loft blocks are mounted to overhead steel beams above the gridiron.
Line sets are rigged with 3/4" Multiline II.
Line sets are plumbed parallel to apron edge.
There is approximately 30,000 lbs. of counterweight available on the loading bridges.
Some 10 lb. – 25 lb. sandbags. A few that are 50 lbs – 100 lbs.
A 2,400 pound capacity arbor assist winch may be located at any line set.

Other Rigging Equipment Available:
(80) Spot sheaves that can provide positions for (40) spot lines
(30) Sheaves for 1/4" aircraft cable

- Gridiron is constructed of steel "subway" grating on I-beams.
- 100 lbs. /sq. ft. maximum load.
- Point load is 500 lbs.
- House has 3' long x 3" diam. pipes to span grating and/or channels.

ADDITIONAL STAGE CONFIGURATIONS

In addition to the standard theatrical setting, the Music Theater may be configured to accommodate orchestras and/or to provide additional stage space. Ordway Center Production Management must be consulted before planning to use any of these configurations.

**Orchestra Shell:**
An orchestra shell, architecturally and acoustically integrated with the Music Theater, is available. When in place no theatrical stage lighting, curtains, etc. may be used. Two size configurations are possible, floor space available is indicated below.

**Small Shell dimensions**
- Upstage width: 40'
- Downstage width: 48'
- Depth from Apron Edge: 33'

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Updated 8/20/15
Music Theater Technical Information
Large Shell dimensions

- Upstage width: 40'
- Downstage width: 65'
- Depth from Apron Edge: 45'

Orchestra Pit:
Various sizes of orchestra pits may be set through the use of both hydraulic elevators and. Dimensions of the two most-used configurations are below; all are extended with the under stage pit area indicated. All pit configurations eliminate audience seating, between 50 and 120 seats depending on configuration used. The pit, when set, is at a fixed height of 8' - 0" below stage level.

- Theatrical Musical Orchestra Pit
  - Upstage width: 46'
  - Downstage width: 16'
  - Overall depth: 17'
  - “Open” depth: 10'
  - Apron edge-pit wall: 7'
- Opera Orchestra Pit

- Upstage width: 46’
- Downstage width: 26’
- Overall depth: 29’
- “Open” depth: 21’

Under Pit dimensions

- Width: 48’
- Apron edge-pit wall: 7’
**Thrust Stage Extension:**
The stage may be extended into the house, creating a semi-thrust stage configuration. This is done with the same hydraulic elevators used for the orchestra pit. Using the thrust eliminates 120 seats.

- Thrust width at permanent apron edge: 46'
- Thrust width at downstage edge of thrust: 26'
- Thrust depth: 21'

**STAGE CURTAINS, DROPS, AND HANGING GOODS**
Refer to house rigging / hanging plot for information on house spacing and location of stage curtains.

**Masking Borders:**
- Five (5) masking borders
- each 12' high x 86' wide.
- No fullness added
- Pipe hem in bottom.

**Masking Legs:**
- Five (5) pairs (total of 10) masking legs
- each 38' high x 20' wide.
- 24.1 oz. Charisma black cotton velour with no fullness added, pipe hem in bottom.
- Two pairs (total of 4) masking tab legs, each tab 38' high x 12' wide.

**Blackout Curtains:**
- Two full width blackout curtains.
- 38' high x 72' wide, 24.1 oz. Charisma black velour, no fullness, and pipe hem.
- 38' high x 60' wide, 24.1 oz. Charisma black velour, no fullness, and pipe hem.

**Black Masking Curtains:**
- There are four (4) masking curtains that create two (2) full stage blackouts and/or traveler curtains.
- Two have dimensions of 38' high x 35' wide.
- Two have dimensions of 38' high x 33' wide.

Scrim Curtains:
- One (1) black sharks tooth scrim, 34' high x 70' wide, sewn seamless, pipe hem.
- One (1) white scrim, 38' high x 70' wide, sewn seamless, pipe hem.

Plastic/Cyclorama Drop:
- Gerriet’s Front/Rear Projection Screen, 11.5 oz. Opera Finished Creamy White
- 38' high x 60' wide.
- Seamless translucent matte, pipe hem.

Bounce:
- One (1) bounce drop, 38' high x 86' wide.
- Natural muslin sewn seamless, pipe hem.

House Curtain and Teaser:
- House Teaser works on line set 00. Not removable.
- House Curtain on line set 0. Not removable.
- The curtain is mounted on a traveler track for storage purposes.
- It is operated as "guillotine" type curtain from the fly rail.
- The House Curtain consists of two curtain sections with overlapping center split.
- Overall dimensions of house curtain are 36' high x 80' wide.
- Dimensions of teaser are 22' high x 76' wide.
- Both are constructed of Charisma Colonial Brick cotton velour.
LIGHTING SYSTEM

CONTROL

Eos 4k Console, ETC, 5000 channel. With 20 sub master wing, and (2) RVI setups – One for Designer desk and one at stage managers console

Back-up/ secondary console; ETC Ion

FOH/ network integration for road consoles and devices;
   3 Permanent, wall mount, programmable Net3 Nodes.
   12 portable, programmable Net3 Nodes.
   12 RJ-45 network tap ports.

ETC Paradigm house & work light control system;
   Two (2) programmable touchscreen controllers. (In light booth and DSL)

Dimming: Nine (9) ETC Sensor 96 racks, one (1) ETC Sensor 12 pack.

Circuits:
   - FOH; 258 @ 2.4k, 2 @ 6k.
   - Stage; 528 @ 2.4k, 15 @ 6k. (All dimmer per circuit).
   Total: 786 theatrical dimmers. (44 FOH circuits dedicated to SPCO system)

ELECTRICS HANGING POSITIONS

- No. 1 Electric Truss: hard-wired on Lineset #5, triangular truss, (52) 2.4Kw circuits.
  Note: this truss is not removable.
- No. 2 Electric Truss: hard-wired on Lineset #59, triangular truss, (59) 2.4Kw circuits.
  Note: This truss is not removable.
- Stage Left Gallery Bridge: equipped with multi-circuit patch boxes for house multi-cable to provide circuits to any line set and/or to side booms.
- Front of House Catwalks: five positions are available, all with hard-wired circuits.
- #1 and #3 catwalks - severely limited use due to location and possible hanging positions.
- #1 and #2 Box Boom positions - permanently hung with (16) Source4 19°.
- Proscenium Towers: hanging positions are available behind doors in rolling Proscenium Towers.
  Requires installation of hanging hardware.
- Balcony Rail: Hanging positions consist of three sets of three 3' pipes,
  95' throw to stage edge, requires installation of hanging hardware.

Note: the #2 catwalk cannot be used as an alternate follow spot location for any type of instrument.
**ELECTRICAL POWER DISTRIBUTION PANELS**

**PANEL A:**
- 400 Amps - 3 phase - 208/120 volt - 5 wire panel with ground
- Location: Power platform - downstage left
- Typically used for chain hoist system and miscellaneous

**PANELS B-E**
- 400 Amps - 3 phase - 208/120 volt - 5 wire panel with ground
- (4 total)
- Location: Power Platform - downstage left
- Typically used for dimmer racks

**PANEL F**
- NO LONGER EXISTS.

**PANEL G:**
- 400 Amps - 3 phase - 208/120 volt - 5 wire panel with ground
- Location: Power Platform - downstage left
- Service on isolation transformer
- Typically used for automation

**PANEL H:**
- 100 Amps - 3 phase - 208/120 volt - 5 wire panel with ground
- Location: Basement level - upstage left

**Sound Power isolated ground**
- 1 – 100 amp – 3 phase – DSR
- 1 – 200 amp – 3 phase – DSR
- (2) 30 Amp circuits at FOH sound console position.

**USR:**
- 100 amp service

(4) 20 Amp stage circuits, 2 each side - All from same source as Panels J and K

US Banks Room has a 50 Amp distribution box available for use.
**AUDIO SYSTEM**

A fully equipped professional sound system is available for use.

House mixing location is in Rear Mezzanine - House Left of Center.

Touring mix location is in the Rear Mezzanine – House Left of Center, approximately 100’ from the stage edge, and requires the removal of seats LL 208 - 214 and MM 208 – 214, and installation of leveling platforms (advance notice is needed). Cable runs to this position from the stage requires 200’ of cable.

In addition to equipment detailed below, a full inventory of stands, cable, adapters, connectors, DI’s – active and passive, etc. is available. Availability and use of any equipment requires advance consultation with the Production Department.

**House System**

- 1 Digico CS D5 Console (MADI only, no fiber optic)
- 2 Digico DigiRack (MADI only, no fiber -optics)
  - Rack 1 – 56 in x 40 out
  - Rack 2 – 56 in
- 2 Digico – 8 Mic/Line Cards (input) (Local rack in Booth)
- 2 Digico – 8 line Output Cards (Local rack in Booth)
- 3 Main Speaker Arrays (on digital winches, stored in ceiling)
  - Left Array: - 4 Meyer MSL-4
  - 2 Meyer CQ-2
  - Center Array: 11 Meyer MICA
  - Right Array: - 4 Meyer MSL-4
  - 2 Meyer CQ-2
- 8 Meyer UPM-1P (under balcony speakers)
- 4 Meyer UPA-2P (Balcony and Gallery Box fill – L & R)
- 8 Meyer 700HP w/VEAM option Subwoofers
- 4 Meyer UPM-1P (portable use)
- 4 Meyer UPM-1P (designated front fills)

**House System Monitors:**

- 4 Meyer CQ-2 Speakers
- 6 Meyer UM-1P Small Stage Monitors
- 6 Meyer USM-1P Large Stage Monitors
- 6 KLA Graphic Equalizers
- 3 KLA Quad Compressor/Limiter
- 3 KLA Quad Auto Gate Processor
Supplementary Mixers
- 1 Midas Verona - 34x4x2
- 1 Midas Venice 2 – 24x4x2
- Midas H3000

Sound Power (clean)
- 1 – 100 amp – 3 phase – DSR
- 1 – 200 amp – 3 phase – DSR
- (2) 30 Amp circuits at FOH sound console position.

Road Show Hook In
Page and program – backstage – 70 volt distribution system

Assisted Listening
- Sennheiser Infra-Red
- 48 – HD1830 Stereo Headsets
- 6 – 1830S Induction Loop Receivers

STAGE MANAGEMENT INFORMATION
A stage manager’s desk is available on stage left that is equipped with a Clearcom RM704, Encore four channel hds/speaker remote station, video monitors, dressing room paging controls, cue light system, first-aid kit. For specific applications this console may be positioned stage right.

A complete video monitoring system is available. This includes color and infra-red cameras from front-of-house, and a black and white camera for orchestra pit conductor. Monitors are permanently mounted in stage manager’s console, fly rail, lighting booth, and in all lobby areas. Movable monitors are available for backstage areas as required.

There is a duplicate stage management console rack that can be hooked up in the House for Tech. Rehearsals.

All dressing rooms, lounge, backstage corridors, and production support areas have paging/show program monitor speakers. A bulletin board next to the stage door entrance is available for use as a call-board.
DRESSING ROOMS
The dressing rooms conform to Actors Equity Association safe and sanitary code conditions. All dressing rooms are equipped with make-up counters and mirrors for each performer, private restrooms, private showers, and wardrobe racks.

Located Stage Level, Stage Left:
DR # 120: Star Room. Seats one (1) - Additionally furnished with carpeting, furniture, sofa, wardrobe closets, baby grand piano, and telephone lines.

Located in the Production Wing:
DR #M106  Capacity – 2
DR #M107  Capacity – 2
DR #M108  Capacity – 2
DR #M109  Capacity – 2
DR #M110  Capacity – 1
DR #M111  Capacity – 1
DR #M213  Capacity – 10
DR #M214  Capacity – 10
DR #M314  Capacity – 6
DR #M316  Capacity - 6

Located Basement Level, Stage Left:
DR #M034  Chorus Room. Seats eighteen (18)
            Additionally furnished with personal effects lockers.
DR #M035  Chorus Room. Seats twenty-two (22)
            Additionally furnished with personal effects lockers.
DR #M001  Orchestra Changing Room. Accommodates twenty-four (20)
            Additionally furnished with carpeting and instrument/wardrobe lockers.
DR #M002  Orchestra Changing Room. Accommodates twenty (20)
            Additionally furnished with carpeting and instrument/wardrobe lockers.

Backstage ADA information

Orchestra change rooms:
- M002 – male (ADA toilet – only accessible via FOH elevator)
- M003 – female (ADA toilet – only accessible via FOH elevator)

Stage area:
- 2 backstage washrooms (ADA toilet) located near the SL wing.
SUPPORT AREAS

Production Office: small office located on the second floor of the Production Wing. Available at all times to Music Theater productions.

Wardrobe Facilities (FOR SHOW USE ONLY)
Laundry:
- Located on the third floor of the production wing.
- Three washers / three dryers / and work sink..

Principle Hair and Makeup Work Room:
Located on the first floor of the production wing

Hair/Wigs Workroom:
- Located on 3rd floor of Production Wing – 12 seats available with lighted mirrors

Other Rooms
Must be reserved in advance. Not always available. Contact Production Director re: availability.
Both rooms have full-wall mirrors and ballet Barres, and have oak tongue-and-groove floors on resilient pads suitable for dance. Both rooms have 16 foot high ceilings with pipe-style hanging grids. A full complement of musicians' chairs, stands, stools; two portable ballet Barres; rehearsal chairs; 6' rectangular and 5' circular folding tables; and rolling acoustic panels/room dividers are all available for use. Freight elevator provides direct access to loading dock and basement support areas.

Drake Room: 56' - 0" long x 48' - 0" wide, plus additional area by windows

U.S. Bank Room: 36' - 0" long x 21' - 0" wide, plus additional area by windows